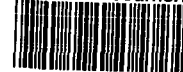


DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

SDMS Document



67631

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: SCIENTIFIC CHEMICAL PROCESSING INC.

LOCATION: 216 PATERSON PLANK ROAD, CARLSBAD
NEW JERSEY, BERGEN COUNTY.

Scientific Chemical Processing is an abandoned hazardous waste processing facility that is presently supporting a trucking companies activities. SCP was ordered to stop operations by NJ DEP on 10-10-80 and the various solvents and paint sludges in their tanks, drums, and tank trailers still remain on site. When in operation SCP practiced poor housekeeping. Sampling data indicates contamination of the air, soil, and neighboring Peach Island Creek.

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

No samples were taken of ground water
Ground water is highly suspected of being contaminated
due to past spillage, on going leaking tanks and observed
leachate ^{escaping} into ^{Peterson Island Creek}.
Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

Aquifers of concern are glacial till and stratified drift.
^{Carswell, L.P.}

^{*Source} - A Appraisal of Water Resources in the Hackensack River Basin, NJ. U.S. Geological Survey - Water Resources Investigation. 74-76, 1976

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern: ^{DWR, Region I files}

less than 5 feet.

^{*Source} - Memo from David Kaplan to Ron Buchanan. 1-30-80
in Div. waste management [H2O waste], NJ DEP, files.

Depth from the ground surface to the lowest point of waste disposal/
storage:

Storage tanks on site are stored approx. 2 feet
ground surface level.

^{*Source} 8-4-82 inspection.

000230

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

44 inches

^{Source} - Figure 5 Climatic Atlas of the US, Dept. of Commerce, National Climatic Center, Ashville, N.C., 1979.

Mean annual lake or seasonal evaporation (list months for seasonal):

33 inches

^{Source} - Figure 4 Climatic Atlas of the U.S., US Dept. of Commerce, National Climatic Center, Ashville, N.C., 1979

Net precipitation (subtract the above figures):

11 inches.

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

fill over organic silt

^{Source} - memo from David Kapkin to Ron Buchanan 1-30-80 in Div. Waste Management [HAZ. Waste Files], N.J. DEP.

Permeability associated with soil type:

$< 10^{-5} \geq 10^{-7}$ cm/sec. Assigned Value of 1

Table 2, "Manual"

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

liquid and sludge

^{Source} - SEP 6-27-80 inventory Div. waste management [HAZ. Waste Files], N.J. DEP.

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Containment, leaking and no liner or incompatible liner.

Source - 8-9-82 inspection - physical observation.

Method with highest score:

Same as above.

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Benzene

CHLOROFORM

Compound with highest score:

~~Benzene~~

CHLOROFORM

(DWR 1/19/79 REG. I ANALYSIS;
ATTACHED)

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

37,5150 gallons.

or 7,503 drums

Basis of estimating and/or computing waste quantity:

SEP inventory on 6-27-80 after facility was closed
by DEP. Inventory is attached.

* * *

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Drinking and Industrial

Source - well permits water allocation unit DWR, NJ DEP files.
AL Greco Carlstadt Health Officer (201) 461-8008, and Jim Lozarro
E. Rutherford Sanitary Inspector (201) 991-4367 8-12-82 phone conversation.
Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

4000 feet - Carlstadt Consumers Ice Co. 517 Rt. 17 North,
Carlstadt

Source: Al Greco - see above.

Distance to above well or building:

4000 feet

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Five (5) wells in Wallinton recently shut down due to organic contamination. Population served = 11,400 people

Wells in E. Rutherford. ① Selerno 118 Mozart St., ② Gello Maple St.

③ B&D Co. Stanley St. Population served 415.

④ one (1) well in Carlstadt - Carlstadt Consumers Ice. pop'n served =

Computation of land area irrigated by supply well(s) drawing from 10,000
aquifer(s) of concern within a 3-mile radius, and conversion to
population (1.5 people per acre):

Source - see above.

None

Total population served by ground water within a 3-mile radius:

21,815

Source - see above.

000233

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

BENZENE	-	42 ppb	} Results of analytical analyses of samples taken by Messrs. Chayla-Wynne & Mox Tan on Jan. 14, 1979. Sample No. C-49945. Copy attached.
CHLOROFORM	-	250 "	
TOLUENE	-	1250 "	
Trichloroethylene	-	200 ppb	
Tetrachloroethylene	-	45 "	

Rationale for attributing the contaminants to the facility:

A sample of waste taken the same day indicated similar compounds in the surface water. See 1-19-79 DWR, Region I analysis attached. Observed release - attached DWR, George Smajda report 4-10-80, and Rich Chayla-Wynne memo to Bob Reed DWR, Region I, files 1-23-79.

2 ROUTE CHARACTERISTICS N/A

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Name/description of nearest downslope surface water:

Average slope of terrain between facility and above-cited surface water body in percent:

Is the facility located either totally or partially in surface water?

000234

Is the facility completely surrounded by areas of higher elevation?

1-Year 24-Hour Rainfall in Inches

Distance to Nearest Downslope Surface Water

Physical State of Waste

* * *

3 CONTAINMENT

Containment

N/A

Method(s) of waste or leachate containment evaluated:

Method with highest score:

000235

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

Chloroform and Benzene.

Compound with highest score:

Chloroform.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See Page 4

Basis of estimating and/or computing waste quantity:

See Page 4

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

*Hackensack River - used for Recreational use,
[i.e. Hackensack Sports Plex Marina], and crabbing*

+ Source

*Al Gneo Carlstadt Health Officer (QOL 261-8008,
phone conversation 8-12-82 and visual observations.*

000236

Is there tidal influence?

Yes.

*Source Memo from David Kaplan to Ron Buchanan
DWM, (HAL waste) file, NJ DEP and Wetland map

Distance to a Sensitive Environment US Dept of Interior, Fish & Wildlife Service
Weehar Ken Road.

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

facility is on coastal wetland

*Source → see above

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

N/A

Distance to critical habitat of an endangered species or national
wildlife refuge, if 1 mile or less:

N/A

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing
bodies) or 1 mile (static water bodies) downstream of the hazardous
substance and population served by each intake:

None

Computation of land area irrigated by above-cited intake(s) and
conversion to population (1.5 people per acre):

N/A

Total population served:

N/A

Name/description of nearest of above water bodies:

Peach Island Creek borders facility property.

Distance to above-cited intakes, measured in stream miles.

N/A

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

PID

Date and location of detection of contaminants

August 9, 1982

Methods used to detect the contaminants:

Photo Ionization Detector

Rationale for attributing the contaminants to the site:

PID meter reading on-site. Please see attached report.

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Acids

Most incompatible pair of compounds:

ACID AND WATER

Toxicity

Most toxic compound:

Chloroform

Hazardous Waste Quantity

Total quantity of hazardous waste:

See page 4

Basis of estimating and/or computing waste quantity:

See page 4

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi

0 to 1 mi

0 to 1/2 mi

0 to 1/4 mi

5,960 persons see page 13

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

NA

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

*SITE IS ON WETLAND. Source: USGS Quad Map
Weehawken Quadrangle*

Distance to critical habitat of an endangered species, if 1 mile or less:

NA

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Luncheonette & diner within 300. feet from the site.

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

NA

Distance to residential area, if 2 miles or less:

5,960 persons within 1 mile radius

From: USGS Map, Weehawken Quadrangle

Distance to agricultural land in production within past 5 years, if 1 mile or less:

NA

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

NA

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

NA